AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A method of detecting suspected anomalous shadows, comprising:

obtaining a difference image representing a difference between two images, which have been obtained of a same subject at different photographing times, by subjecting said two images to an interimage process to obtain the difference between said two images,

obtaining a processed difference image by subjecting the obtained difference image to an image process wherein an actual difference between the two images on which said difference image is based is enhanced relative to artifacts appearing due to misalignment of a position of a structural element of the subject on one of the two images from a corresponding position of the structural element on the other of the two images, and

detecting the actual difference between the two images from the processed difference image as suspected anomalous shadows.

2. (original): A method of detecting suspected anomalous shadows as defined in claim 1, wherein

the image process is an image process that suppresses the artifacts more than the actual difference between the two images on which the difference image is based.

3. (original): A method of detecting suspected anomalous shadows as defined in claim 2, wherein

the image process for suppressing the artifacts relative to the actual difference between the two images is a process based on a morphology process employing structuring elements that are larger than the artifacts while smaller than the actual difference.

4. (original): A method of detecting suspected anomalous shadows as defined in claim 1, wherein

the image process is an image process that enhances the actual difference more than the artifacts.

5. (original): A method of detecting suspected anomalous shadows as defined in any of claims 1, 2, 3, or 4, wherein

the interimage process is a subtraction process in which the structural positions of the two images are correlated and a subtraction process is performed therebetween.

6. (original): A method of detecting suspected anomalous shadows as defined in any of claims 1, 2, 3, or 4, wherein

the two images upon which the difference image is based are radiation images that have been obtained of the same subject in a temporal series, each of said images having been obtained at a different time, and which become the objects of a comparison to determine temporal change.

7. (original): A method of detecting suspected anomalous shadows as defined in any of claims 1, 2, 3, or 4, wherein

the substantially round-shaped differences from among the actual differences appearing in the processed difference image are detected as the suspected anomalous shadows.

8. (previously presented): An apparatus for detecting suspected anomalous shadows, comprising:

an interimage processing means for obtaining a difference image representing a difference between two images, which have been obtained of a same subject at different photographing times, by subjecting said two images to an interimage process to obtain the difference between said two images,

an image processing means for obtaining a processed difference image by subjecting said difference image to an image process wherein an actual difference between the two images on which said difference image is based is enhanced relative to artifacts appearing due to misalignment of a position of a structural element of the subject on one of the two images from a corresponding position of the structural element on the other of the two images, and

a detecting means for detecting the actual difference between the two images from the processed difference image as suspected anomalous shadows.

9. (original): An apparatus for detecting suspected anomalous shadows as defined in claim 8, wherein

the image processing means is a means for carrying out a process which suppresses the artifacts more than the actual difference between the two images.

10. (original): An apparatus for detecting suspected anomalous shadows as defined in claim 9, wherein

as a means for carrying out the process which suppresses the artifacts more than the actual difference between the two images, the image processing means performs a process based on a morphology process employing structuring elements that are larger than the artifacts while smaller than the actual difference.

11. (currently amended): An apparatus for detecting suspected anomalous shadows as defined in claim 8, wherein

the image processing means is a means for carrying out a process which enhances the actual difference between two images ~~relative to~~more than the artifacts.

12. (original): An apparatus for detecting suspected anomalous shadows as defined in any of claims 8, 9, 10, or 11, wherein

the interimage process is a subtraction process in which the structural positions of the two images are correlated and a subtraction process is performed therebetween.

13. (original): An apparatus for detecting suspected anomalous shadows as defined in any of claims 8, 9, 10, or 11, wherein

the two images upon which the interimage image is based are radiation images that have been obtained of the same subject in a temporal series, each of said images having been obtained at a different time, and which become the objects of a comparison to determine temporal change.

14. (original): An apparatus for detecting suspected anomalous shadows as defined in any of claims 8, 9, 10, or 11, wherein

the detecting means is a means for detecting the substantially round-shaped differences from among the actual differences appearing in the processed difference image as the suspected anomalous shadows.

15. (new): The method of claim 1, wherein the interimage processing comprises global matching between corresponding structural elements within the two images obtained of the same subject and local matching between corresponding small local regions within the two images obtained of the same subject.

16. (new): The apparatus of claim 8, wherein the interimage processing comprises global matching between corresponding structural elements within the two images obtained of the same subject and local matching between corresponding small local regions within the two images obtained of the same subject.